Amendments to the Claims:

The following listing of claims replaces all other versions of claims previously presented.

Listing of Claims:

1 (Currently Amended): A method of forming a topographical pattern in a surface of a resist layer, comprising sequential steps of:

(a) providing a substrate having a surface;

(b) forming a layer of a resist material of a desired thickness on said substrate surface, said resist layer having an exposed upper surface;

(c) subjecting selected areas of said exposed upper surface of said resist layer to exposure to an energy beam to form therein a latent image of a desired topographical pattern to be formed in said resist layer;

(d) contacting said exposed upper surface of said resist layer with a liquid developing solution comprising a preselected solvent for developing said latent image into said desired topographical pattern, and simultaneously supplying ultrasonic energy to said solution, the combination of supplying said ultrasonic energy to said liquid developing solution comprising said preselected solvent providing improved image contrast between the selected, exposed areas and unexposed areas of said resist layer and increasing an interval for developing said latent image from several seconds to tens of minutes, relative to when said liquid developing solution does not comprise said preselected solvent and said ultrasonic energy is not supplied thereto.

2 (Original): The method as in claim 1, wherein:

step (a) comprises providing a substrate made of a material selected from the group consisting of: metal, metal alloy, glass, ceramic, glass-ceramic composite, and laminates of two or more of the aforementioned materials.

3 (Original): The method as in claim 1, wherein:

step (b) comprises forming a layer of a positive resist material; and

step (c) comprises forming soluble areas in said resist layer corresponding to said selected areas thereof subjected to exposure to said energy beam.

4 (Original): The method as in claim 1, wherein:

step (b) comprises forming a layer of a negative resist material; and

step (c) comprises forming insoluble areas in said resist layer corresponding to areas thereof subjected to exposure to said energy beam.

5 (Currently Amended): ~~The~~ A method ~~as in claim 1, wherein~~

~~step (b) comprises forming a layer of a positive e-beam resist material;~~

~~step (c) comprises forming soluble areas in said resist layer corresponding to said selected areas thereof subjected to exposure to an e-beam; and~~

~~step (d) comprises contacting said exposed upper surface of said resist layer with a~~ of forming a topographical pattern in a surface of a resist layer, comprising sequential steps of:

(a) providing a substrate having a surface;

(b) forming a layer of a resist material of a desired thickness on said substrate surface, said resist layer having an exposed upper surface;

(c) subjecting selected areas of said exposed upper surface of said resist layer to exposure to an energy beam to form therein a latent image of a desired topographical pattern to be formed in said resist layer;

(d) contacting said exposed upper surface of said resist layer with a liquid developing solution comprising a preselected solvent for developing said latent image into said desired topographical pattern, and simultaneously supplying ultrasonic energy to said solution, the

combination of supplying said ultrasonic energy to said liquid developing solution comprising said preselected solvent providing improved image contrast between the selected, exposed areas and unexposed areas of said resist layer, relative to when said liquid developing solution does not comprise said preselected solvent and said ultrasonic energy is not supplied thereto, wherein

said liquid developing solution ~~comprising~~ comprises a solvent comprised of 50 vol. % isopropyl alcohol (IPA) and 50 vol. % de-ionized (DI) water, and the interval for developing said latent image is increased from several seconds to tens of minutes, relative to when said liquid developing solution is comprised of a solvent comprising n-amyl acetate and said ultrasonic energy is not supplied thereto.

6 (Original): The method as in claim 5, wherein:

step (d) comprises supplying said ultrasonic energy at a frequency of about 40 kHz and an intensity of about 185 W.

7 (Original): The method as in claim 5, wherein:

step (d) comprises increasing said developing interval from several seconds to about 15 - 30 min. at room temperature, relative to when said liquid developing solution is comprised of a solvent comprising n-amyl acetate and said ultrasonic energy is not supplied thereto.

8 (Original): The method as in claim 1, wherein:

step (c) comprises subjecting said selected areas of said exposed upper surface of said resist layer to exposure to an electron beam or a laser beam.

9 (Currently Amended): ~~The~~ A method ~~as in claim 1~~ of forming a topographical pattern in a surface of a resist layer, comprising sequential steps of:

(a) providing a substrate having a surface;

(b) forming a layer of a resist material of a desired thickness on said substrate surface, said resist layer having an exposed upper surface;

(c) subjecting selected areas of said exposed upper surface of said resist layer to exposure to an energy beam to form therein a latent image of a desired topographical pattern to be formed in said resist layer;

(d) contacting said exposed upper surface of said resist layer with a liquid developing solution comprising a preselected solvent for developing said latent image into said desired topographical pattern, and simultaneously supplying ultrasonic energy to said solution, the combination of supplying said ultrasonic energy to said liquid developing solution comprising said preselected solvent providing improved image contrast between the selected, exposed areas and unexposed areas of said resist layer, relative to when said liquid developing solution does not comprise said preselected solvent and said ultrasonic energy is not supplied thereto, wherein

steps (a) - (d) together comprise a method of manufacturing a master for a magnetic stamper/imprinter utilized for patterning of magnetic recording media by means of a contact printing process, wherein:

step (c) comprises forming a latent image of a servo pattern for a disk-shaped magnetic recording medium.

10 (Original): The method as in claim 9, wherein:

step (d) comprises developing said latent image within said resist layer to form a topographical pattern in said exposed surface of said resist layer comprised of a plurality of depressions having a depth in the range from about 100 to about 500 nm, a width in the range from about 50 to about 500 nm, and a spacing in the range from about 50 to about 500 nm.

11 (Withdrawn): A structure comprising a substrate having a surface with a topographically patterned resist layer thereon comprised of a plurality of projecting and recessed features, said topographically patterned resist layer formed by a process comprising sequential steps of:

(a) providing a substrate having a surface;

(b) forming a layer of a resist material of a desired thickness on said substrate surface, said resist layer having an exposed upper surface;

(c) subjecting selected areas of said exposed upper surface of said resist layer to exposure to an energy beam to form therein a latent image of a desired topographical pattern to be formed in said resist layer;

(d) contacting said exposed upper surface of said resist layer with a liquid developing solution comprising a preselected solvent for developing said latent image into said desired topographical pattern, and simultaneously supplying ultrasonic energy to said solution, the combination of supplying said ultrasonic energy to said liquid developing solution comprising said preselected solvent providing improved image contrast between the selected, exposed areas and unexposed areas of said resist layer, relative to when said liquid developing solution does not comprise said preselected solvent and said ultrasonic energy is not supplied thereto.

12 (Withdrawn): The structure according to claim 11, wherein said substrate is made of a material selected from the group consisting of: metal, metal alloy, glass, ceramic, glass-ceramic composite, and laminates of two or more of the aforementioned materials.

13 (Withdrawn): The structure according to claim 11, wherein said resist layer is comprised of a positive or negative resist material.

14 (Withdrawn): The structure according to claim 13, comprising a master for making therefrom at least one magnetic stamper/imprinter utilized for patterning of magnetic recording media by means of a contact printing process.

15 (Withdrawn): The structure according to claim 14, wherein said topographically patterned resist layer corresponds to a servo pattern to be formed in the surface of a disk-shaped magnetic recording medium.

16 (Withdrawn): The structure according to claim 15, wherein said topographically patterned upper surface of said resist layer comprises a plurality of depressions having a depth in the range from about 100 to about 500 nm, a width in the range from about 50 to about 500 nm, and a spacing in the range from about 50 to about 500 nm.

17 (Original): A method of developing a latent image comprised of exposed and unexposed areas formed in a layer of a resist material, comprising contacting said resist layer with a preselected liquid developing solvent while simultaneously supplying ultrasonic energy to said solvent, wherein the combination of supplying said ultrasonic energy to said preselected liquid developing solvent provides an increased developing interval and improved image contrast between said exposed and unexposed areas of said layer of said resist material, relative to when said liquid developing solution does not comprise said preselected solvent and said ultrasonic energy is not supplied thereto.

18 (New): The method as in claim 5, wherein:

step (b) comprises forming a layer of a positive e-beam resist material;

step (c) comprises forming soluble areas in said resist layer corresponding to said selected areas thereof subjected to exposure to an e-beam.